

Revised Date 09/09

PHYS 1060 Introduction to Astronomy (3-0-3)

Course Maximum Enrollment: 25

Special Facility or Equipment Needs/Safety Rules and Issues: Lecture room with facilities for lecture/demonstration with multimedia available.

Lab Fee: none

Course Description: An introductory course in focusing on the solar system. No physics background required. Prereq: Eligibility for MATH 1010.

Pre- and Co-requisites: Eligibility for Math 1010

Texts and Readings: Chaisson, E., and S. McMillan. (1999). *Astronomy Today*, 3rd Ed. New York, NY: Prentice Hall. (ISBN 0-13-080100-3) or latest edition.

Course Goal: This course is designed to acquaint the student with the methods of studying astronomy from historical times to exploration using modern day technology. The emphasis is how information is gathered and interpreted.

Course Objectives:

The student should be able to understand and explain how the scientific method is used to build theories regarding the earth, solar system, and the universe.

The student should be able to understand and explain how the study of astronomy developed historically and how early discoverers and their discoveries have contributed to the study of science.

The student should be able to understand how technology is used to gather information about the solar system.

The student should understand and discuss theories of the origin of the solar system.

The student should be able to discuss the Solar system, the planets, their composition, and their interactions.

Course Content:

Week 1: The foundation of astronomy

Week 2: Historical perspective of the study of astronomy

Week 3: Radiation: information from space

Week 4: Spectroscopy and Telescopes

Week 5: Review and Examination 1

Week 6: The Solar System

Week 7: The place of the Earth

Week 8: Venus

Week 9: Mars

Week 10: Review and Examination 2

Week 11: Jupiter

Week 12: Saturn

Week 13: Uranus, Neptune, and Pluto

Week 14: Solar system asteroids and comets

Week 15: Origin of the Solar System

Week 16: Final Examination

Assessment:

3 Examinations 300 points

Weekly quizzes 100 points

Paper on selected topic 100 points

Total 500 points

Reading and Writing Across the Curriculum: The reading and writing components of these aforementioned assessments satisfies the Reading and Writing Across the Curriculum requirement as stipulated in SLCC's academic policy.

Grading and Absence Policy:

Three examinations are given. Final grade will be based on the cumulative points. The recommended scale is:

90% and above A

80-89% B

70-79% C

60-69% D

Below 60% F

Make up examinations and quizzes will be given only to those persons having legitimate excuses. The instructor should be contacted in advance-not after-the examination. It is the discretion of the instructor to accept an excuse. It is the responsibility of the student to arrange with the instructor for make up examinations and quizzes. Typically, make up quizzes will not be given. The lowest quiz grade or a quiz that is missed will be dropped. A student will receive a grade of zero on an assignment or test for the following: cheating, plagiarism, or collusion. Any student who commits or attempts to commit any of these acts will be subject to disciplinary proceedings as detailed in the Student Discipline Procedures outlined in the Student Handbook.

Students with Disabilities: Students with a disability requiring assistance or accommodation, such as for testing, note takers, readers, etc., should contact the instructor as soon as possible. Students may also contact the dean of Students with questions about such services.

Emergency Evacuation Procedure: A map of this floor is posted in the front of this building. The map marks the evacuation route and the Designated Rescue Area. This area is where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the teaching faculty.